



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,400	10/23/2003	Philip D. Nguyen	2003-IP-012125U1	8502

7590 05/15/2006
Robert A. Kent
Halliburton Energy Services
2600 S. 2nd Street
Duncan, OK 73536-0440

EXAMINER

WEBB, GREGORY E

ART UNIT	PAPER NUMBER
----------	--------------

1751

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/692,400	Applicant(s) NGUYEN ET AL.	
	Examiner Gregory E. Webb	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,9,12-14,16,17,21,24-29,31-37,39 and 40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,9,12-14,16,17,21,24-29,31-37,39 and 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

[Handwritten Signature]
5/8/06

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, 4, 5, 9, 12, 13, 14, 16, 17, 21, 24, 25-29, 31-37, 39, 40 are rejected under 35

U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Features critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

The applicant argues that the more narrow range now included is supported by the broader range previously recited.

The examiner does not agree with the applicant's arguments presented. The apparent motivation for the applicant's choice of the data point 35% is not based on a critical practice of the claimed invention. But is instead intended merely to overcome previous rejections. A person of ordinary skill in the art of chemistry would not have seen this point enable unless said person were to consult the prosecution history to see the applicant's motivations were to merely overcome a prior art rejection. Thus it would not seem that one of ordinary skill unfamiliar with the prosecution history would see this more narrow range as enabled.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1751

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 4, 5, 9, 12, 13, 14, 16, 17, 21, 24, 25-29, 31-37, 39, 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Thompson, Arthur J. (US6060439).

Concerning the stripping and the resin, Thompson, Arthur J. teaches the following:

The nitrogen containing compounds useful to clean the optical polymers and resins in accordance with this invention are soluble in various solvents, such as water, alcohols, aqueous inorganic hydroxides, esters, ethers, cyclic ethers, ketones, alkanes, terpenes, dibasic esters, glycol ethers, pyrrolidones, or low or non-ozone depleting chlorinated and

Art Unit: 1751

chlorinated/fluorinated hydrocarbons. Thus, the composition or mixture utilized in the process of the invention, and which comprises one or more of the above-described nitrogen containing compounds, may be dissolved in any one or more of the before-mentioned solvents as an additional component of the cleaning composition. The detailed description below provides a non-limiting disclosure of the additional components that may be selected. The compositions of the invention, thus, may also include one or more of the above-mentioned solvents. Aqueous solutions of the quaternary ammonium hydroxides, organic amines and alkanolamines are preferred in the practice of the invention, but other solvents may be used in conjunction with them. The form the compositions are in when used for cleaning may vary from liquid at various temperatures, to vapor, to aerosol, or other dispersions appropriate for the components of the composition selected. Buffers, corrosion inhibitors and other additives may also be included in the cleaning compositions of the invention.(see col. 6 10-35)

Concerning the claimed pH-adjusting agent and the preferred alkaline pH adjusting agent,

Thompson, Arthur J. teaches the following:

Examples of specific preferred quaternary ammonium hydroxides, which can be used in the method of the invention, include tetramethylammonium hydroxide, tetraethylammonium hydroxide, tetrapropylammonium hydroxide, trimethylethylammonium hydroxide, methyltriethylammonium hydroxide, dimethyldiethylammonium hydroxide, methyltributylammonium hydroxide,

Art Unit: 1751

methyl tripropylammonium hydroxide, tetrabutylammonium hydroxide, phenyltrimethylammonium hydroxide, phenyltriethylammonium hydroxide, and benzyltrimethylammonium hydroxide. Most preferred is tetramethylammonium hydroxide, tetrabutylammonium hydroxide, and tetraethylammonium hydroxide.(see col. 4 10-25)

Concerning the claimed solvent, preferred solvent and the claimed furan-based resin, Thompson, Arthur J. teaches the following:

Preferably, the glycol ether component of the mixture disclosed above contain effective amounts of the glycol ether material of the formula:
R.sub.10 --O--R.sub.11 --O--R.sub.12 where R.sub.10 is C.sub.2 -C.sub.20 alkyl, C.sub.5 -C.sub.6 cycloalkyl, benzyl, furanyl or tetrahydrofuranyl, R.sub.11 is C.sub.1 -C.sub.20 alkyl, C.sub.5 -C.sub.6 cycloalkyl, benzyl, phenyl, furanyl or tetrahydrofuranyl, R.sub.12 is hydrogen or an alcohol selected from claim 7 above. Examples of these glycol ethers are ethylene glycol methyl ether, diethylene glycol methyl ether, ethylene glycol ethyl ether, diethylene glycol ethyl ether, ethylene glycol propyl ether, diethylene glycol propyl ether, ethylene glycol butyl ether, diethylene glycol butyl ether, methyl methoxybutanol, propylene glycol methyl ether, dipropylene glycol, dipropylene glycol methyl ether, propylene glycol propyl ether, dipropylene glycol propyl ether, propylene glycol butyl ether, and dipropylene glycol butyl ether. In the composition listed R.sub.10, R.sub.11 and R.sub.12 can be a number C.sub.1 to C.sub.10 alkyl,

Art Unit: 1751

preferably C.sub.1 to C.sub.6 alkyl, more preferably C.sub.1 to C.sub.4 alkyl. Among the most preferred are propylene glycol butyl ether, dipropylene glycol methyl ether, dipropylene glycol, methyl methoxy butanol and diethylene glycol butyl ether.(col. 9 40-60)

Concerning the preferred acidic pH adjusting agent and the exemplified acidic agent, Thompson, Arthur J. teaches the following:

Any compound or mixture of compounds suitable for reducing the pH of the nitrogen based cleaner solutions of this invention, and which do not unduly adversely inhibit the cleaning action thereof or interfere with the resulting cleaned parts, may be employed. As examples of such compounds are, for example, acids, bases and their salts acting as buffers, such as inorganic mineral acids and their salts, weak organic acids having a pKa of greater than 2 and their salts, ammonium salts, and buffer systems such as weak acids and their conjugate bases, for example, acetic acid and ammonium acetate. Preferred for use as such components are acetic acid, boric acid, citric acid potassium biphthalate, mixtures of ammonium chloride and ammonium acetate, especially a 1:1 mixture of these two salts, and mixtures of acetic acid and ammonia and other amines.(col 10 30-45)

Concerning the exemplified alkaline agent, Thompson, Arthur J. teaches the following:

Preferably, the inorganic hydroxide component of the mixture disclosed above contains an effective amount of the inorganic hydroxide based on alkali metal hydroxides. Examples of these are sodium hydroxide, potassium

Art Unit: 1751

hydroxide and lithium hydroxide. They can be used singly or in the form of a mixture of two or more of them. Among the most preferred are sodium and potassium hydroxide.(c. 8 15-20)

Claims 1, 2, 4, 5, 9, 12, 13, 14, 16, 17, 21, 24, 25-29,31-37, 39, 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondoh, Junji (US5954891).

Concerning the claimed resin coating, resin and the preferred substrates, Kondoh, Junji teaches the following:

The present invention relates to a detergent composition for removing resinous stains, and more particularly to a detergent composition exhibiting excellent removability against difficult-to-remove resinous stains adhered to surfaces of hard materials, such as plastic lens resins, tackifiers, paints, ink cured products, adhesives for temporary fixing, fixing agents, bonding agents, sealing agents, binders, and protective films. In addition, the present invention relates to a method for removing resinous stains, more particular to a method for removing resinous stains which are ascribed to one or more members selected from plastic lens resins, adhesives, and tackifiers adhered to plastic lens or adhered to glass molds, jigs and tools usable in the production process of the plastic lens.(c. 1 5-20)

Concerning the claimed pH-adjusting agent, preferred alkaline pH adjusting agent and the exemplified alkaline agent, Kondoh, Junji teaches the following:

The alkaline detergents usable in the present invention are not particularly limited, and any of conventional alkaline detergents may be used as long as they include from 0.5 to 30% by weight of an alkali metal hydroxide. In addition, it is desired that the alkaline detergent is an aqueous solution whose water content is from 5.0 to 99.5% by weight.

Concrete examples of the alkali metal hydroxides usable herein include lithium hydroxide, sodium hydroxide, potassium hydroxide, and the like, with a preference given to sodium hydroxide and potassium hydroxide. These alkali metal hydroxides may be used alone or in combination.(c13 5-15)

Concerning the claimed solvent and the preferred solvent, Kondoh, Junji teaches the following:

Ethylene glycol monoethers, such as monoethylene glycol monomethyl ether, diethylene glycol monomethyl ether, triethylene glycol monomethyl ether, tetraethylene glycol monomethyl ether, pentaethylene glycol monomethyl ether, hexaethylene glycol monomethyl ether, heptaethylene glycol monomethyl ether, octaethylene glycol monomethyl ether (The above compounds may be respectively abbreviated as (POE).sub.1 monomethyl ether, (POE).sub.2 monomethyl ether, (POE).sub.3 monomethyl ether, (POE).sub.4 monomethyl ether, (POE).sub.5 monomethyl ether, (POE).sub.6 monomethyl ether, (POE).sub.7 monomethyl ether, and (POE).sub.8 monomethyl ether; or alternatively, the above compounds may be collectively referred to as (POE).sub.1-8 monomethyl ethers. Incidentally, similar compounds may be respectively expressed by the terminologies corresponding to above.),

Art Unit: 1751

(POE).sub.1-8 monoethyl ethers, (POE).sub.1-8 monopropyl ethers,
(POE).sub.1-8 monoisopropyl ethers, (POE).sub.1-8 monoallyl ethers,
(POE).sub.1-8 monobutyl ethers, (POE).sub.1-8 monoisobutyl ethers,
(POE).sub.1-8 monohexyl ethers, (POE).sub.1-8 mono-2-ethylhexyl ethers,
(POE).sub.1-8 mono-octyl ethers, and the like.(c7 30-55)

Concerning the preferred acidic pH adjusting agent and the exemplified acidic agent, Kondoh, Junji teaches the following:

In Detergent Composition A of the present invention may further include, as occasion demands, one or more members of the following ingredients usually employed in detergents in amounts so as not to impair the effects of the present invention: Compounds having chelating abilities, including aminocarboxylic acids, such as hydroxyethyl aminoacetic acid, hydroxyethyl iminodiacetic acid, ethylenediamine tetracetic acid, and the like, or salts thereof; preservatives; anticorrosive agents; defoaming agents, such as silicones, and the like; antioxidants; amine compounds, such as amine compounds having 1 to 5 nitrogen atoms with a molecular weight of from 50 to 300, alkanolamines, morpholines, cyclic amines, polyamines, and linear or branched alkylamines; esters, such as methyl ester of coconut fatty acid and benzyl acetate; hydrocarbon solvents; and alcohols.(c10 25-40)

Art Unit: 1751

Claims 1, 2, 4, 5, 9, 12, 13, 14, 16, 17, 21, 24, 25-29,31-37, 39, 40 are rejected under 35

U.S.C. 102(b) as being anticipated by Cummings, Gerald (US5750482).

Concerning the stripping, Cummings, Gerald teaches the following:

It has also been discovered in accordance with the present invention that the effectiveness of the aqueous glass cleaning compositions of this invention can be further enhanced by incorporating a small amount of an organofluorocarbon surfactant in active amounts within the range of from about 0.001-0.5% by weight, preferably from about 0.01-0.1% by weight, based on the total composition. The preferred fluorocarbon surfactants include the anionic salts of perfluoroaliphaticoxybenzene sulfonic acids and the anionic salts of linear perfluoroalkyl-oxybenzoic acids. Examples of the former class of fluorocarbon surfactants can be represented by the following formula:

##STR1##

where R.sub.f is a perfluoroaliphatic group of from about 5 to about 15 carbon atoms, preferably from about 8 to 12 carbon atoms in the aliphatic group which may be an alkyl group or alkenyl group, and A is a cation such as an alkali metal, ammonium or amine.(cols. 5-6)

Concerning the claimed pH-adjusting agent, preferred acidic pH adjusting agent, preferred alkaline pH adjusting agent and the exemplified alkaline agent, Cummings, Gerald teaches the following:

5. A composition according to claim 1, wherein the pH modifying agent is

Art Unit: 1751

present in an amount of about 0.01 to about 2% and is selected from the group consisting of acetic acid, citric acid, propionic acid, sulfamic acid, succinic acid, maleic acid, hydrochloric acid, phosphoric acid, sulfuric acid, aqueous ammonium hydroxide, monoethanolamine, diethanolamine, triethanolamine, morpholine, sodium hydroxide, and sodium carbonate.(clm 5)

Concerning the claimed solvent and the preferred solvent, Cummings, Gerald teaches the following:

Illustrative of the glycol ether cosolvent is ethylene glycol monoethyl ether, ethylene glycol monopropyl ether, ethylene glycol monobutyl ether, diethylene glycolmonoethyl ether, diethylene glycol monobutyl ether, propylene glycol monopropyl ether, propylene glycol monobutyl ether and dipropylene glycol monomethyl ether. Ethylene glycol monobutyl ether is preferred.(col 4 45-50)

Concerning the exemplified acidic agent, Cummings, Gerald teaches the following:

Chelating or sequestering agents, when used, are in an amount of from about 0.01 to about 1%. Suitable such agents are ethylene diamine tetraacetic acid, sodium nitrilotriacetate and sodium citrate.(c7 45-50)

Claims 1, 2, 4, 5, 9, 12, 13, 14, 16, 17, 21, 24, 25-29,31-37, 39, 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Dodge, Paul D. (US4608086).

Art Unit: 1751

Concerning the claimed pH-adjusting agent, claimed solvent, preferred acidic pH adjusting agent and the preferred solvent, Dodge, Paul D. teaches the following:

A solution was prepared according to the present invention including 15 parts dipropylene glycol methyl ether, 2 parts nonylphenoxy nonionic surfactant, 47 parts hydroxyacetic acid, 32 parts hydrochloric acid, and 4 parts phosphoric acid. The solution was tested as described in Example V obtaining suitable membrane removal and etching of the concrete.(see example VIII)

Concerning the preferred alkaline pH adjusting agent and the exemplified acidic agent, Dodge, Paul D. teaches various suitable acids and alkaline compounds in table I.

Concerning the exemplified alkaline agent, Dodge, Paul D. teaches the following:

It is well recognized that concrete should be etched prior to applying coatings such as polyurethane and the like. In the past concrete has been etched by first treating the surface with an acid composition such as muratic acid. The acid step is then followed by a neutralization, for example, using a sodium hydroxide solution. The neutralized materials are then lifted and the surface dried. Such prior etching processes have been very time consuming in view of the multiple steps. Also, such prior processes have been somewhat difficult for nontrained personnel to carry out since the acid tends to continue to etch until neutralized thus limiting the amount of surface which can be treated with the acid step before going back and neutralizing the acid. Moreover the further step of water washing and picking up the residues further extends the time

Art Unit: 1751

required for etching concrete. The present invention overcomes such disadvantages by providing a single step membrane remover/etchant system which may be applied by a machine which simultaneously applies water and also picks up the residues or by well known manual methods.(c1 10-35)

Concerning the claimed epoxy-based resin and the resin, Dodge, Paul D. teaches the following:

A solution was prepared according to the present invention including by weight 10 parts methylene chloride, 45 parts 2-butoxyethanol, 1.2 nonionic surfactant (Igepal CO-630), 1.8 parts nonionic surfactant (Igepal CO-430), 15 parts hydroxyacetic acid and 27 parts concentrated hydrochloric acid. Concrete floor portions having membranes of various commercially available materials were treated. The portions were treated as described in Example I with highly satisfactory results being obtained. The membrane on the first floor portion was acrylic of the type produced by Brock White under the trademark Cure and Seal. The second portion had a membrane of chlorinated rubber (Master Seal 66.TM.). The third concrete portion had a membrane which was a combination of chlorinated rubber and epoxy resin (Tricoat 18.TM.). The fourth portion had a membrane of oleo resin.(see example IV)

Previous rejections to claims 1, 2, 4, 5, 9, 12, 13, 14, 16, 17, 21, 24, 25-29,31-37, 39, 40 as being rejected under 35 U.S.C. 102(b) over Horn et al (US 5,529,887) are hereby withdrawn based on the applicant's specific requirement for using very specific glycol ether compounds.

Art Unit: 1751

Previous rejection of claims 1, 2, 4, 5, 9, 12, 13, 14, 16, 17, 21, 24, 25-29, 31-37, 39, 40 as being anticipated by Nakayama et al (US 6,197,124) are hereby withdrawn based on the applicant's specific requirement for using very specific glycol ether compounds.

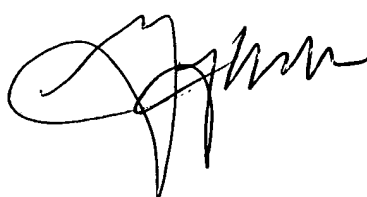
Conclusion

The remainder of the references cited are meant to demonstrate state of the art in resin removal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 571-272-1325. The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglass McGinty can be reached on (571)272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 Gregory E. Webb
Primary Examiner
Art Unit 1751

gew